

## ABSTRACT

When a solution of an inorganic phosphoric acid, added to with calcium ions and magnesium ions, is incubated for a preset time duration, an apatite particle obtained is reduced in size, depending on the concentration of the 5 magnesium ions. By employing an apatite particle, for which the concentration of the magnesium ions and the incubation time duration are controlled adequately, it is possible to improve the gene transfection efficiency into the cells and the gene expression efficiency in the cells.